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Serial No.: 09/742,095
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Examiner: KOCH
Group Art Unit: 1734

In the Claims:

Please amend the claims as follows:

1. (Currently Amended) A method of manufacturing laminated beams composite products, wherein a plurality of lamellas elements are assembled by gluing them together under pressure, comprising the steps of:

providing a number of lamellas elements to be assembled;

applying an amount of glue to at least one surface of each said lamella element;

assembling the lamellas elements; and

subjecting the assembled lamellas elements to pressure in a press;

wherein a waiting lamella stacking time is defined by a lag between said glue application and pressure application steps; and

wherein said glue application step includes controlling an amount of at least one component of said glue applied to a said lamella element at a specific point thereon as a function of said waiting lamella stacking time.

2. (Currently Amended) The method according to claim 1, wherein the glue comprises an adhesive having multiple components, one said adhesive component comprising a hardener and wherein the amount of one of said adhesive components is controlled so as to control a ratio of said hardener to said

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other adhesive components as a function of said waiting lamella stacking time.

3. (Currently Amended) The method according to claim 2, wherein the glue is a two-component adhesive comprising hardener and a glue, the ratio of hardener to glue is controlled to be lower for longer lamella stacking waiting times.

4. (Currently Amended) The method according to claim 1, wherein the glue is a one-component glue, and the amount of said glue applied to each said lamella element is increased as a function of increased lamella stacking waiting time for each said lamella element.

5. (Currently Amended) The method according to claim 4 wherein the amount of glue applied to each lamella element is constant over the surface of said lamella element, but varies between lamellas elements.

6. (Currently Amended) The method according to claim 4, wherein the first lamella element in a series of lamellas elements receives a smaller amount of glue than subsequent lamellas elements.

7. (Currently Amended) The method according to claim 4, wherein the amount of glue applied to each lamella element varies over the surface of said lamella element.

8. (Currently Amended) The method according to claim 4, wherein the amount of glue applied is controlled by controlling movement of the lamella(s) element(s) during glue application.

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9. (Currently Amended) The method according to claim 8, wherein the amount of glue applied is controlled by controlling the rate of application of glue onto the surface of each lamella element.

10. (Currently Amended) The method according to claim 8, wherein the speed of movement is varied from one lamella element to another.

11. (Currently Amended) The method according to claim 8, wherein the speed of movement is varied during the glue application on each element.

12. (Original) The method according to claim 11, wherein the speed of movement is varied stepwise or continuously.

13. (Original) The method according to claim 9, wherein the application rate is varied stepwise or continuously.

14. (Currently Amended) An apparatus for the manufacturing of laminated beams composite products, wherein a plurality of lamellas elements are assembled by gluing them together under pressure, comprising

an element a lamella feeder;

a glue applicator;

a lamella stacking unit;

a control unit; and

a press;

said control unit being programmable to run at least one of a control sequence for the glue applicator and the element lamella feeder to provide an optimal applied glue amount which varies as a function of a waiting lamella stacking time defined

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as the time between glue application and pressing for a given lamella element.

15. (Currently Amended) The apparatus as claimed in claim 14, wherein the control sequence is adapted to control the speed of movement of the feeder, and thereby of the lamellas ~~elements~~ through the glue applicator.

16. (Currently Amended) The apparatus as claimed in claim 14, wherein the control sequence is adapted to control the rate of glue application to the lamellas ~~elements~~.

17. (Currently Amended) Apparatus for the controlled application of glue to lamellas ~~elements~~ to be assembled to a laminated beam ~~composite structure~~, comprising

- ~~a lamella an element~~ feeder;
- a glue applicator; and
- a control unit;

said control unit being programmable to run at least one of a control sequence for the glue applicator and the lamella ~~element~~ feeder to provide an optimal applied glue amount which varies as a function of a waiting lamella stacking time defined as the time between glue application and pressing for a given ~~element~~ lamella.